

Promoting the Broadband Future

**Keynote Address of Commissioner Kathleen Q. Abernathy
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(As prepared for delivery)

Thank you very much. I am very pleased to be here at Supercomm. I always like to learn what is going on in the equipment industry – to walk the floor and see all of the exciting new technologies and products on display. In many ways, the state of your industry reflects not only how your *customers* are doing, but also how well *regulators* are doing in creating an environment that is conducive to investment. Of course, your ability to sell new equipment turns on many factors that have nothing to do with the FCC, including the value and effectiveness of your products and the overall strength of the economy. But the regulatory environment is also very important, as we have seen in recent years, because FCC rules regarding the forced sharing of network elements and related matters can have a significant impact on the willingness of telecom carriers, cable operators, and other service providers to invest in new infrastructure. No doubt that's why I hear from many of you. You have a strong stake in the regulatory debates that have been waging at the FCC, and you have made tremendous contributions to those debates. As I'll discuss more in a few moments, it was the High Tech Broadband Coalition that proposed the broadband framework ultimately adopted by the FCC in the Triennial Review proceeding – and that was the only major portion of the Order that was upheld by the D.C. Circuit Court of Appeals.

Promoting Broadband Deployment

I thought I would focus my remarks today on the FCC's efforts to promote broadband deployment, because broadband unquestionably represents the future of communications – and in turn the future for equipment manufacturers. Consumers are increasingly relying on broadband services to communicate, as well as for entertainment, education, and health care, and the applications will only keep multiplying. President Bush has embraced this vision of the future with his call for universal broadband availability by 2007.

Not surprisingly, broadband penetration is greatest in urban areas and among wealthier consumers, but the digital divide is closing pretty quickly. I just returned from a trip to Alaska, where I was able to visit with Native Alaskans living above the Arctic Circle who are making broadband services part of their everyday lives. A consortium of companies use DSL and wireless broadband technologies to furnish the village schools, health clinics, and a surprising number of private homes with broadband connections.

This trip really drove home something that has become increasingly clear to me: broadband has the power to make geographic isolation irrelevant. It brings a world of information to rural communities via the Internet, so school children have access to the same resources in Selawick, Alaska as in Chicago, Illinois. It gives rural families access to medical specialists without having to travel long distances. And it fuels economic expansion by connecting small businesses to millions of potential customers all over the world and by allowing larger businesses to set up call centers and otherwise tap into a new employee base. Broadband networks also are inherently more efficient than narrowband networks, so they allow service providers to lower their costs. As a result of the consumer benefits and efficiencies, wireline telecommunications carriers, cable

operators, wireless carriers, satellite operators, electric utilities, and others are racing to build out broadband networks. You probably know better than I do that the circuit-switched networks that were optimized for voice communications are rapidly giving way to packet-switched networks that transmit a converged stream of voice, video, and data via digital bits.

As a staunch believer in free markets, my basic philosophy is to get out of the way and let market forces deliver broadband to consumers. But the FCC by statute must take a more active role, because section 706 of the Telecommunications Act of 1996 instructs the FCC to facilitate the deployment of broadband networks. We have been actively engaged in pursuing this goal by removing regulatory impediments to investment by wireline carriers, allocating more spectrum for wireless broadband services, and fostering the development of other broadband technologies. I'll talk about each of these areas in turn.

According to the FCC's latest broadband report, by the end of 2003 cable operators had more than 16 million broadband lines in service, and DSL providers served approximately 9.5 million lines. Part of cable's marketplace advantage may reflect superior technology or more aggressive deployment, but it also may reflect years of disparate regulatory treatment. While cable broadband facilities are not regulated at the federal level, wireline facilities have been subject to extensive regulation.

Wireline Broadband Networks

It was against this backdrop that the Commission completed the *Triennial Review* proceeding last year, in which we decided to refrain from imposing unbundling obligations on next-generation fiber loop facilities. The Commission concluded that

competition would emerge from cable and other technologies — as well as from wireline competitors — without resorting to a heavy-handed forced-sharing regime. Just as importantly, the Commission found that imposing unbundling obligations at deeply discounted TELRIC rates would discourage investment by incumbent LECs and new entrants alike. Relying in part on section 706, we decided to forego an unbundling obligation in order to stimulate new broadband deployment. And we are beginning to see this decision bear fruit: In the wake of the Order, several Bell companies and many smaller carriers have announced plans either to begin deploying or to step up their deployment of fiber to the home and other deep-fiber architectures.

As I mentioned earlier, equipment manufacturers played a key role in the adoption of this deregulatory broadband framework. More specifically, the High Tech Broadband Coalition made a unique contribution to the debate by pointing out the interest of equipment manufacturers in selling as much equipment as possible to a broad base of customers including incumbents and new entrants. In this sense, the interests of manufacturers are closely aligned with the public interest — and in turn the FCC's interest — in promoting the widest possible deployment of broadband facilities. So while the arguments of incumbent LECs for unbundling relief had to be taken with a grain of salt, similar arguments made by equipment vendors added a great deal of credibility to the case for deregulation.

I was very pleased when the D.C. Circuit upheld the broadband framework in March, and even more gratified when the Solicitor General decided not to pursue an appeal of the decision vacating other portions of the Triennial Review Order. Had an appeal gone forward, it would have undermined the hard-fought regulatory certainty the

industry has craved and finally obtained in the broadband arena. We finally have a set of unbundling rules for broadband that have been judicially sustained, and now incumbent carriers and competitors can develop business strategies without worrying about the rules being thrown out in court.

In coming weeks, I am optimistic that the FCC will resolve several outstanding questions regarding the specifics of deploying fiber to multiple dwelling units and the treatment of fiber-to-the-curb versus fiber-to-the-home. In my view, both fiber to mass market MDUs and fiber-to-the-curb in mass market situations should be treated the same as fiber-to-the-home deployments, because the rationale for relief is the same. Basically, regardless of whether fiber is extended to a terminal within a few hundred feet of the customer or to the premise itself, and regardless of whether the customer resides in a single-family home or in an apartment building, a requirement to unbundle next-generation fiber loops at TELRIC rates destroys the incentive to invest. Moreover, in all of these scenarios, the wireline carrier must compete with cable operators, who continue to lead DSL providers in the marketplace by a nearly two to one margin. Fundamentally, regulators should not create regulatory schemes that prefer one architecture over another, as long as the new deployment is capable of supporting very high-speed Internet access and video programming services.

Other Broadband Platforms

I am very pleased that wireline companies are increasing their broadband deployment in the wake of the Triennial Review Order and that cable operators continue to extend their own market-leading broadband capabilities -- but that is not enough. The Commission also must promote the deployment of other broadband platforms. As I

mentioned a moment ago, cable and DSL providers serve approximately 26 million customers. Other platforms *collectively* serve only a small fraction of that amount. Our ultimate goal is for consumers to be able to choose from among a multiplicity of broadband services, rather than just one or two. Some platforms may be better suited for urban areas, while others may be better suited for rural areas. And consumers may choose to make trade-offs among price, capacity, and attributes such as mobility. Moreover, the emergence of new broadband platforms will promote a high degree of innovation, both technologically and in terms of consumer-friendly service packages. Finally, more robust broadband competition may someday enable the Commission to dismantle economic regulation for *all* communications services, including voice services, thereby fulfilling Congress's goal of developing a procompetitive, deregulatory framework.

With this in mind, the FCC has taken a number of proactive steps to promote the development of wireless broadband services. At our June meeting, we provided increased flexibility in the MMDS and ITFS bands to create the possibility of innovative new uses, including commercial broadband services. We have also focused on identifying new spectrum, and that is why, in cooperation with NTIA, the Commission allocated 90 MHz of spectrum for 3G services, and we also issued licensing and service rules. I am also optimistic that the FCC's efforts to develop more effective secondary markets for spectrum will enable more consumers to reap the benefits of broadband technology.

In addition to this focus on *licensed* providers, we have looked to *unlicensed* spectrum to foster the deployment of broadband services. Many of us have become quite

familiar with the 2.4 GHz unlicensed band, as this spectrum has enabled an explosion of Wi-Fi “hot spots” in homes, offices, coffee shops, hotels, and many other settings. The FCC recently allocated an additional 250 MHz of unlicensed spectrum at 5.8 Gigahertz for Wi-Fi. While Wi-Fi systems thus far complement, rather than compete with, last-mile technologies, the development of several new technical standards, including Wi-Max, as well as the Commission’s recent NPRM concerning the potential for unlicensed devices to operate on a non-interfering basis in the broadcast television spectrum, could dramatically extend the range and robustness of wireless broadband services.

Another promising technology is broadband over powerline, or BPL. Electric utilities have field-tested BPL systems and successfully delivered broadband Internet service to a small number of consumers. If interference concerns can be addressed, BPL will hold tremendous promise for consumers, because it could bring broadband to any home that has electricity. The Commission is sending the right signals to the market. We resisted efforts to explore the potential imposition of economic regulations on BPL services in the NPRM adopted last year, because we want to give this nascent service room to develop before there is any proceeding concerning regulatory obligations. In fact, I doubt that there will *ever* be a need to impose common-carrier-type obligations on a nascent platform such as BPL. The Commission hopes to issue an Order regarding the deployment of BPL this summer.

Finally, satellite operators also are striving to be part of the broadband future. High-speed services are available now from DBS providers, and other companies and joint ventures are preparing to launch a new generation of satellites that will be capable of providing more robust broadband services. Such offerings might be especially

attractive in rural areas, where terrestrial networks are particularly costly. I also believe that the FCC's recent efforts to reform the satellite licensing process will eventually help speed the delivery of new services to consumers.

Removing Other Regulatory Barriers to Deployment

In addition to promoting additional infrastructure investment, the Commission must continue to break down other barriers to deployment. One important area concerns right-of-way management. There is no question that local governments have legitimate interests in regulating rights-of-way and recovering the cost of digging up streets (and any other costs). But in some cases, providers have complained of burdensome application processes, excessive processing delays, and exorbitant fees that appear to bear no relation to cost. The Commission has been working with state and local governments to address these concerns and to develop best practices. And we should continue to play an active role in this area to ensure that right-of-way management does not become a barrier to deployment.

The Commission also has been considering the appropriate regulatory framework for broadband Internet access services provided over cable and DSL networks. While the Triennial Review tackled the critical question of unbundling obligations for broadband *facilities*, the Commission also must address the regulatory obligations attached to the provision of broadband *services*, including the extent to which nondiscrimination obligations exist and whether services must be tariffed and backed by cost studies. One of my priorities has long been to harmonize the disparate treatment of cable broadband and DSL-based Internet access services. Unfortunately, these proceedings have been delayed as a result of the *Brand X* litigation in the Ninth Circuit, but a possible appeal to

the Supreme Court could help pave the way for further reform of the current regulatory structure.

Lastly, apart from broadband Internet access services, the Commission needs to address the appropriate regulatory framework for IP-enabled services such as VOIP. VOIP has flourished in an environment of minimal regulation, and we need to ensure that it remains that way. At the same time, as almost everyone has come to recognize, the Commission also needs to ensure that core social policy objectives are achieved, including access to E911 services, access for persons with disabilities, the ability of law enforcement to conduct surveillance, and the preservation of universal service.

I do not know at this point how much regulation will be required to ensure fulfillment of these goals, but I am committed to regulating with a light touch and ensuring that any rules we adopt are narrowly tailored to these compelling governmental interests. In particular, it seems clear that we should not impose economic regulations concerning entry, rates, or service quality. Such intervention in the marketplace has traditionally been justified as a means of curbing the abuse of market power, yet in the IP arena, there is no dominant provider. Rather, all are new entrants. Imposing common-carrier-type regulations would surely chill investment and innovation, so it is critical for policy makers to avoid such requirements at the federal and state level.

I am concerned, however, because in recent months a number of state commissions have asserted jurisdiction over VOIP services and have sought to impose entry regulation, among other rules. I believe that IP-enabled services are inherently interstate, in light of the network architecture and technical characteristics – indeed, digital bits do not heed *national* boundaries, let alone *state* boundaries. Moreover, if

service providers were subject to a patchwork of disparate rules from state to state, that would impede national and regional entry strategies, and as a result would deny important benefits to consumers. So I hope that the outcome of the FCC's pending rulemaking on IP-enabled services is the development of a national framework that establishes the predictability and consistency that are needed to avoid chilling investment and innovation, and I hope we do it soon. I believe that states will continue to play an important role in enforcing generally applicable consumer protection rules, such as statutes barring deceptive trade practices and certain telemarketing practices. I also expect to work cooperatively with the states in ensuring fulfillment of the social policy goals such as disabilities access and universal service. But states should not have the ability to impose economic regulations or other rules on this interstate service that are inconsistent with the federal scheme, or else the future of IP-enabled communications may be compromised.

In closing, I think it is important for regulators to recognize that technology is moving faster than we are. We need to develop more flexible regulatory structures that are centered on the fulfillment of core social policy objectives, and less bound up with arcane service categories or labels like telecommunications service or information service. It will undoubtedly be a major challenge for regulators to construct an appropriate regime that promotes investment and innovation, rather than retarding these benefits. At some point soon, Congress may need to step in and address limitations in the statute. But I am committed to doing my best to help bring the promise of broadband to all Americans, and I look forward to working with my colleagues, with Congress, and with private industry on this critical goal.

Thank you very much for allowing me to speak with you today, and if we have time, I would be happy to take some questions.